

FIG. 1

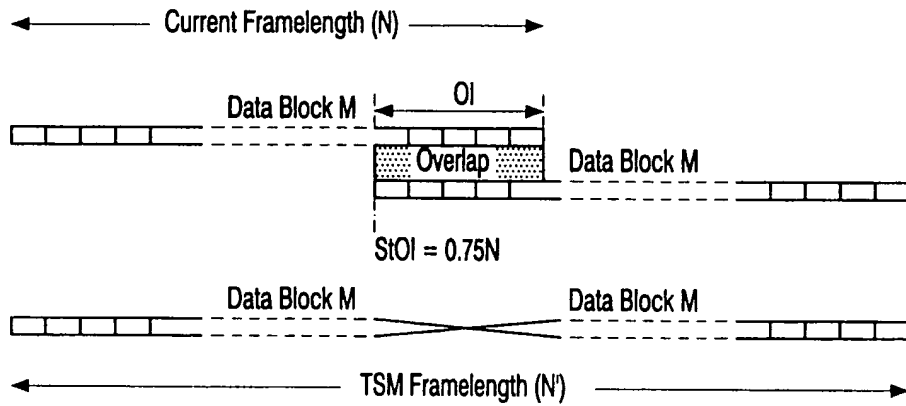


FIG. 2
PRIOR ART

2/5

Analysis Block

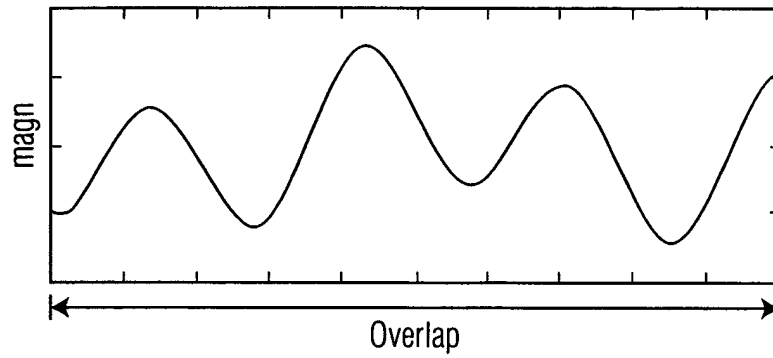


FIG. 3a
PRIOR ART

Synthesis Block

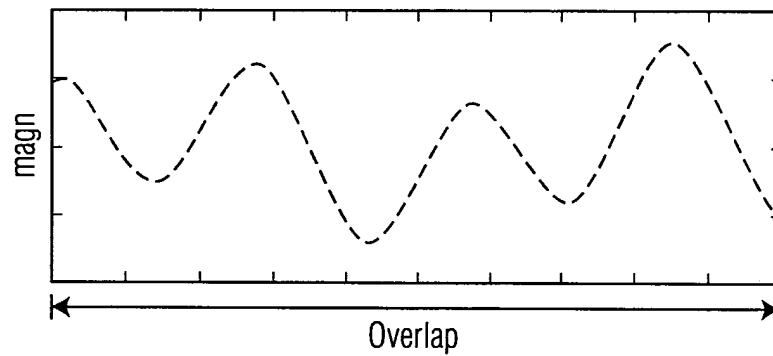


FIG. 3b
PRIOR ART

Synchronisation

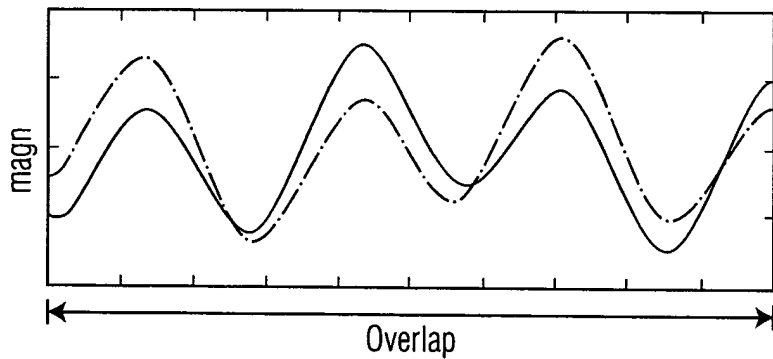


FIG. 3c
PRIOR ART

3/5

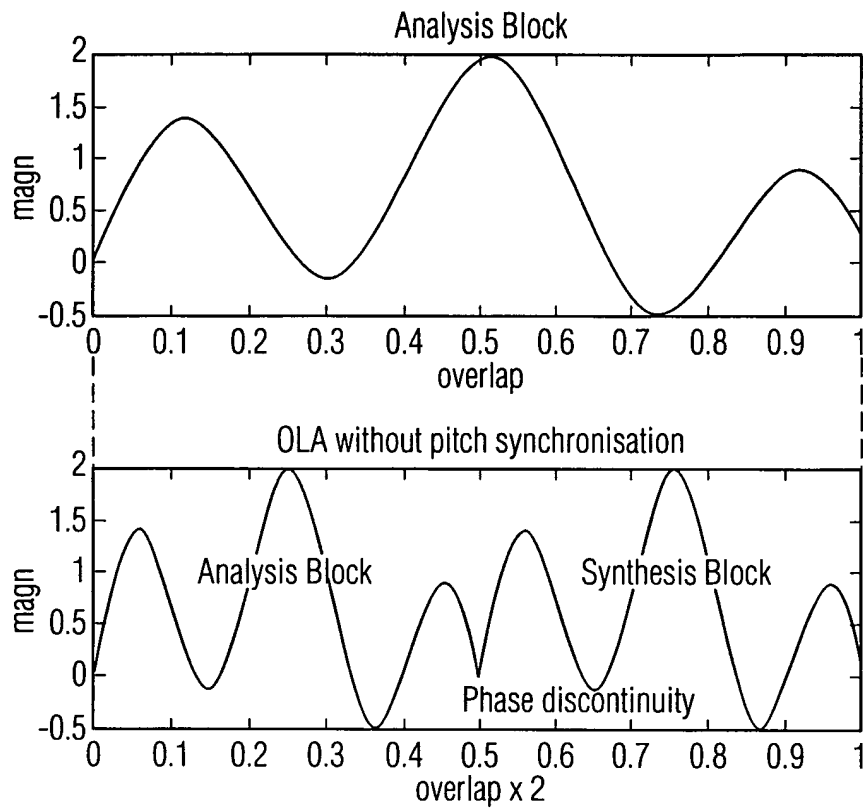


FIG. 4
PRIOR ART

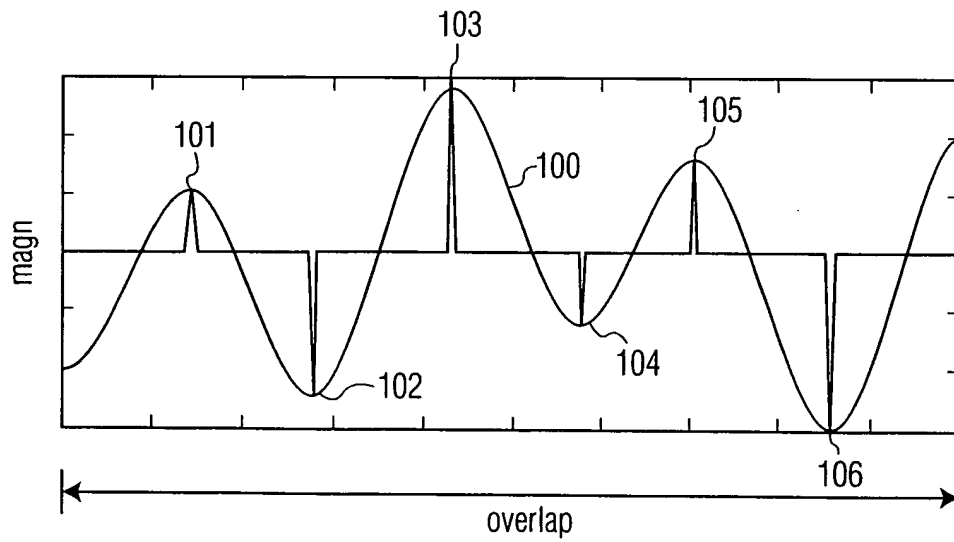


FIG. 5

4/5

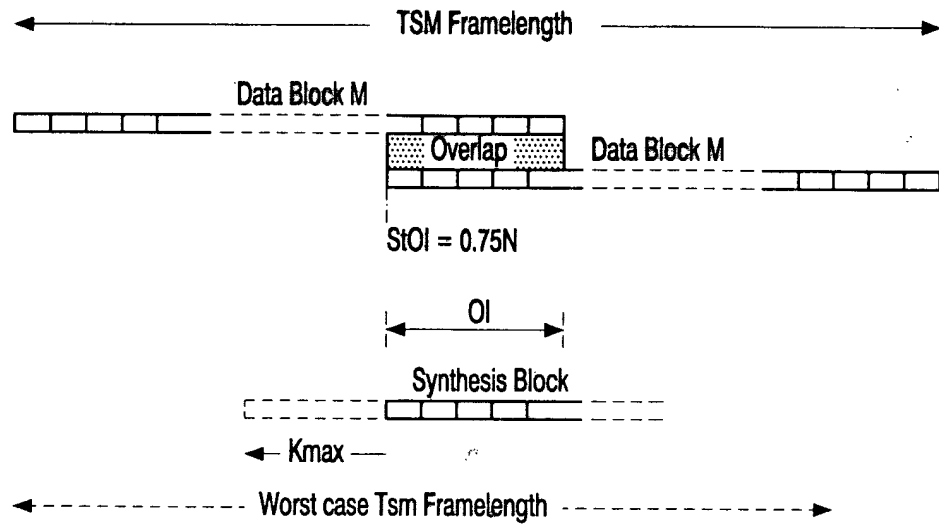


FIG. 6

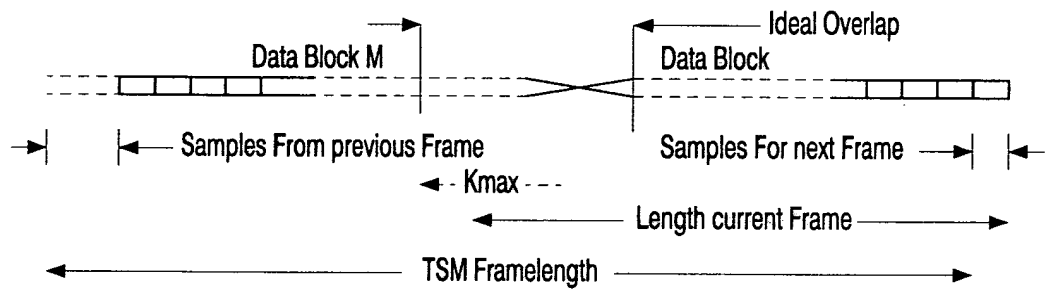


FIG. 7

Analysis Ap		Synthesis Sp	
Magnitude	Location	Magnitude	Location
Val0	12	Val0	11
Val1	27	Val1	24
Val2	67	Val2	45
*	-1	Val3	58
		Val4	66
		Val5	73
		*	-1

FIG. 8

Iteration	D_array	d_count	D loc	d_gate	nd_array	nd_count	Nd_gate	D loc	Action
1	Ap	0	12	0	Sp	1	1	12	Multiply magnitude and chose new driving array
1. new driving array decision		1	27			1		25	Driving array stays the same
2	Ap	1	27	0	Sp	1	1	25	not the same
2. driver loc is less than non driver			27			2		46	Change driving array
3	Sp	2	46	1	Ap	1	0	27	Not same, increment non driving array
3.			46			2		67	Change driving array
4.	Ap	2	67	0	Sp	2	1	46	Increment count for non-driver
4			67			3		59	
5	Ap	2	67	0	Sp	3	1	59	Increment non driver count
			67			4		67	
6	Ap	2	67	0	Sp	4	1	67	Multiply
6		3	-1			5		74	Incrementing both brings conclusion: null termination.

FIG. 9